

SAMPLE OUTLINE OF INSPECTION REPORT

1.0 Executive Summary

- Date of inspection
- Inspection team
- Name of dam
- Owner of dam
- Size of dam
- Hazard classification
- Conditions during inspection
- Conclusions
- Recommendations

2.0 Dam Safety Inspection

2.1 Data Reviewed - list all data reviewed

2.2 Operational Status during Field Inspection

- weather conditions immediately preceding and during the inspection
- reservoir water surface elevation
- reservoir storage
- tailwater elevation
- releases from spillway
- normal high water elevation
- maximum reservoir elevation
- maximum reservoir elevation to date

2.3 Historical Events - Chronologically list any important events (e.g., flooding, earthquakes, high discharges, etc.) that have occurred at the dam site.

2.4 Emergency Preparedness

- hazard classification
- access to site
- communications
- warning system
- auxiliary power
- remote operation
- security of site
- reservoir evacuation potential
- operating instructions

2.5 Hydrology

- Discuss the adequacy of the spillway for the current IDF (inflow design flood) or PMF (probable maximum flood).

2.6 Geologic Features

- Regional Geology
- Site Geology
 - general
 - dam
 - foundation and abutments (i.e., geologic description)
 - treatment (e.g., excavation, grouting, etc.)
 - evaluation
- Spillway
 - geology
 - treatment
 - evaluation
- Outlet Works
 - geology
 - treatment
 - evaluation
- Reservoir
- Landslide Potential
 - abutments
 - reservoir rim
- Seismicity
 - general
 - liquefaction potential
- Seepage (from foundation & abutments)

2.7 Structural Features

- Seepage (structures)
- Dam
 - description
 - review of design
 - review of construction
 - evaluation of existing conditions

Note: Consider static and dynamic stability, freeboard, drainage control, riprap, settlement, slumps, cracks, structural performance, major vegetation, erosion, etc. Discuss what data were (or were not) available for review and any design or construction methods used which differ from current techniques. State any design or construction deficiencies (e.g., no stability analysis performed, lack

of known material properties, no compaction of embankment materials, etc.). Also, state the existing conditions.

- Spillway
 - description
 - review of design
 - review of construction
 - evaluation of existing conditions

Note: Consider capacity relative to floods, structural adequacy, hydraulic adequacy, operation, inlet conditions, channel or conduit conditions, stilling basin and/or outlet channel adequacy, etc.

- Outlet Works (if present)
 - description
 - review of design
 - review of construction
 - evaluation of existing conditions

Note: Consider capacity, structural adequacy, hydraulic adequacy, operation, inlet conditions, conduit, stilling basin and/or outlet channel adequacy, etc.

- Other Features
- Instrumentation (if present)

2.8 Mechanical Features (if present)

- Consider structural adequacy and integrity of equipment and control features, pipelines, auxiliary power, remote control, normal and emergency operating capabilities, etc.

3.0 Conclusions

- Conclusions for each major feature of the examination even if its condition is satisfactory. Major features include: emergency preparedness, hydrology, geologic features, structural features (e.g., dam, spillway, outlet works, etc.), and mechanical features.
- Each conclusion should be numbered in sequence.
- Conclusions should provide support for, or lead to, recommendations.

4.0 Recommendations

List of all recommendations. Recommendations should be written concisely, and they should focus on action to be taken. For convenience of reporting and tabulation, each recommendation should be numbered. All recommendations

should be supported by a conclusion.

5.0 Appendices (include as applicable)

1. Inspection Checklist
2. IDNR Inspection Report Form
3. Photographs
4. Geotechnical Report
5. Hydrologic and Hydraulic Calculations
6. Stability Calculations
7. Existing Condition Survey
8. References
9. Other Supporting Documentation
10. Drawings